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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,208	11/08/1999	EVA SIMMONS	000500-196	2331

7590 01/26/2005

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EXAMINER

KIDWELL, MICHELE M

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/380,208

Applicant(s)

SIMMONS ET AL.

Examiner

Michele Kidwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/12/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15 and 25 – 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Buell (US 4,900,317).

Regarding claims 15 and 25, Buell discloses a method of achieving in an absorbent article that includes (1) an absorbent body [21] disposed between a liquid-impermeable bottom sheet [25] which is intended to lie distal from a wearer in use, (2) a liquid-permeable upper sheet [26] which is intended to lie proximal to the wearer, and (3) either a) at least one longitudinally extending liquid barrier [15] on each side of a center line of the upper sheet made of essentially liquid-impervious material and fastened along or adjacent to a respective longitudinally extending side extremity of the absorbent article and comprising a free elastic sealing edge intended to be stretched against the wearer, or b) above the upper sheet, a top liquid-impermeable sheet which is intended to lie against the wearer, includes elastic for shaping the article to the wearer's body, and includes apertures intended to lie in register with the anus and the urethra orifice of the wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet, an improved sealing ability against the skin of the wearer,

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at a given available elongation, by at least one sealing edge on each side of the center line, comprising modifying or treating the absorbent article in such a way as to cause the absolute value of $\Delta P = 2y \cos\theta_m / r$ for said sealing edge to increase, where y designates the surface tension of a liquid to be absorbed by suction, r designates the radius of the largest circle that can be encompassed in any pore with walls formed by said sealing edge against the wearer's skin at the given available elongation, and $\cos\theta_m$ is the weighted mean value of $\cos\theta$, where θ is the wetting angle of the liquid to the sealing edge or the skin comprising the pore walls as set forth in col. 9, lines 17 – 21, 32 – 33 and figure 6.

The applicant states on page 13 of the instant specification that the product of $\Delta P = 2y \cos\theta_m / r$ can be increased by influencing the wetting angle between the liquid to be sucked up (i.e. urine) and the skin or the barrier material, respectively. Buell discloses that the leg cuffs of the absorbent article comprise an impermeable, hydrophobic portion (48) and a breathable, permeable portion (45) as set forth in col. 9, lines 17 – 44. The examiner contends that the disclosure of a hydrophobic portion (well defined in the art as having a wetting angle greater than 90) and a hydrophilic portion (well defined in the art as having a wetting angle less than 90) within the same cuff which is located between the liquid to be sucked up (i.e. urine) and the skin meets the applicant's criteria as one situation that will increase the product of $\Delta P = 2y \cos\theta_m / r$ and will ultimately provide an improved sealing ability against the skin of the wearer.

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Alternatively, the examiner notes that the instant specification states on page 10 that the wetting angle of the skin varies in accordance with the state of the skin i.e., whether the skin is clean or dirty. The examiner contends that if the wetting angle of the skin is dirty, then as admitted by applicant's disclosure, the wetting angle of the skin has changed from that of clean skin and the wetting angle between the liquid to be sucked up and the skin has been influenced and would ultimately increase the product of $\Delta P = 2\gamma \cos\theta m/r$.

As to claims 26 – 28 and 35 – 36, Buell discloses a method comprising treating the sealing edge with a layer of material such that a higher wetting angle of the liquid to the sealing edge comprising the pore wall will be obtained and/or such that a higher wetting angle of the liquid to the skin of the wearer will be obtained within those regions in which the sealing edge lies against the skin when the absorbent article is donned as set forth in col. 9, lines 17 – 44. Buell discloses that the leg cuffs of the absorbent article comprise an impermeable, hydrophobic portion (48) and a breathable, permeable portion (45). The examiner contends that the disclosure of a hydrophobic portion (well defined in the art as having a wetting angle greater than 90) and a hydrophilic portion (well defined in the art as having a wetting angle less than 90) within the same cuff will provide a higher wetting angle (i.e. hydrophobic portion) of the liquid to the sealing edge than hydrophilic portion.

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Alternatively, the examiner contends that dirty skin vs. clean skin will provide the same differential wetting angle in view of the applicant's disclosure which states that the wetting angle of the skin varies in accordance with the state of the skin, i.e., whether the skin is clean or dirty.

With respect to claim 29, the applicant is reminded that:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted)

This apparatus claim is considered a product by process claim and is limited to the structure which includes (1) an absorbent body disposed between a liquid-impermeable bottom sheet which is intended to lie distal from a wearer in use, (2) a liquid-permeable upper sheet which is intended to lie proximal to the wearer, and (3) either a) at least one longitudinally extending liquid barrier on each side of a center line of the upper sheet made of essentially liquid-impervious material and fastened along or adjacent to a respective longitudinally extending side extremity of the absorbent article and comprising a free elastic sealing edge intended to be stretched against the wearer, or b) above the upper sheet, a top liquid-impermeable sheet which is intended to lie against the wearer, includes elastic for shaping the article to the wearer's body, and includes apertures intended to lie in register with the anus and the urethra orifice of the wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet.

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Accordingly, Buell discloses such a structure as set forth in the rejection of claim 15 above. See MPEP 2113 and 2114. Specifically:

>While features of an apparatus may be recited either structurally or functionally, claims< directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. >*In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); < *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

With reference to claims 30 – 34, 37 – 39, and 41, see the rejection of claims 15 and 29.

Regarding claim 40, Buell discloses an article wherein the free elastic sealing edge is comprised of a ribbon-like elastic film (31) as set forth in figure 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 – 24 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buell (US 4,900,317)

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With reference to claims 16 – 24, Buell discloses a method of improving sealing ability against the skin of the wearer as set forth in the rejection of claim 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to experiment with the wetting angles in order to determine the most effective product since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art.

With reference to claim 42, the examiner contends that the claimed limitation is an obvious matter of design choice that does not patentably distinguish the claimed invention from the prior art.

Response to Arguments

Applicant's arguments filed November 12, 2004 have been fully considered but they are not persuasive.

In response to the applicant's arguments that Buell does not focus on, or teach ways of improving, the sealing effect between the skin of the wearer and the sealing edge of the cuff, the examiner disagrees.

The examiner contends that the disclosure of a hydrophobic portion (well defined in the art as having a wetting angle greater than 90) and a hydrophilic portion (well defined in the art as having a wetting angle less than 90) within the same cuff which is located between the liquid to be sucked up (i.e. urine) and the skin meets the applicant's criteria as one situation that will increase the product of $\Delta P = 2\gamma \cos\theta m/r$ and will ultimately provide an improved sealing ability against the skin of the wearer.

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The applicant argues that the hydrophobic portion of the leg cuff is situated on the inner surface. However, the inner surface extends to the tip of the cuff (where reference character "34" is located in figure 4, for example) which may be construed as the sealing edge of the barrier and in fact, does cover the distal edge (35) at the top of the leg cuff.

In response to the applicant's argument that the wetting angle of the skin varies in accordance with the state of the skin, the examiner notes that the specifics (i.e. what kind of dirt is concerned) argued by the applicant are not supported by the originally filed disclosure. The specification states that the wetting angle varies in accordance with whether the skin is clean vs. dirty. The kind of dirt has never been discussed as a factor until this point. The applicant is correct in stating that the claim limitations include modifying or treating the absorbent article and the examiner contends that initially clean skin that becomes dirty after soiling, for example, does in fact modify the skin and, in turn, the article.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a ribbon like elastic film that is not enclosed) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Kidwell whose telephone number is 571-272-4935. The examiner can normally be reached on Monday - Friday, 5:30am - 2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on 571-272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michele Kidwell
Examiner
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